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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/018,485

12/19/2001

Alan W. O'Neill

36-1674

7995

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07/10/2006

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EXAMINER

HSU, ALPUS

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 07/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/018,485

Applicant(s)

O'NEILL ET AL.

Examiner

Alpus H. Hsu

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/15/03, 12/10/03, 1/22/05 | 6) <input type="checkbox"/> Other: ____. |

Art Unit: 2616

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
 - (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
 - (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
 - (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
 - (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
 - (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
 - (g) BRIEF SUMMARY OF THE INVENTION.
 - (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
 - (i) DETAILED DESCRIPTION OF THE INVENTION.
 - (j) CLAIM OR CLAIMS (commencing on a separate sheet).
 - (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
 - (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).
2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to **a single paragraph** on a separate sheet within the range of **50 to 150 words**. It is important that the abstract not exceed

Art Unit: 2616

150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The drawings are objected to because in Fig. 1, the labeling for IP Router as “?R” is confusing and misleading.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2616

In claim 1, lines 14-15, "said second access node" lacks antecedent basis.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-4, 7, 11, 12, 16-22 are rejected under 35 U.S.C. 102(e) as being anticipated by RAMJEE et al. in U.S. Patent No. 6,842,462, hereinafter referred to as RAMJEE.

Referring to claims 1-4, 7, 11, 12, 16-22, RAMJEE discloses a method of controlling routing of packets in a connectionless routing protocol network including an infrastructure of packet switching nodes (routers R4-R6) interconnected by packet transport links, and a plurality of access nodes (Base Stations BS5-BS8) to which a routing path, defined by data held in packet switching nodes located along said routing path, may be directed in said infrastructure for a given network address, said method comprising: routing packets along a first routing path for a first network address, which routing path is directed to a first access node serving a mobile node using said first network address via a communications link; designating an interface, other than the communications link to the mobile node from the first access node, on which to forward packets arriving along said first routing path; altering routing in said infrastructure for said first network address to create a second routing path for said first network address, directed to said second access routing packets along a first routing node ; altering routing in said infrastructure for said first network address to remove said first routing path not before said second routing path is created; second access node serves said mobile node; and handing over the

Art Unit: 2616

communications link of the mobile node, such that the routing packets to said second access node via said second routing path; utilizing packet encapsulation, packet tunneling, and network address being IP address (see col. 2, lines 10-47, col. 3, lines 45-61, col. 4, lines 2-13, 40-44).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over RAMJEE in view of RAUHALA in U.S. Patent No. 6,611,547, hereinafter referred to as RAUHALA.

Referring to claims 5 and 6, RAMJEE differs from the claims, in that, it does not disclose the features of including one or more control packets for initiating the routing alteration and managing the routing alteration transmission, which are well known in the art and commonly used in communications field for signaling and control purposes.

RAUHALA, for example, from the similar field of endeavor, teaches the uses of one or more control packets (signaling messages) for initiating the routing alteration and managing the

Art Unit: 2616

routing alteration transmission (see abstract), which can be easily adopted by one of ordinary skill in the art to implement into the method of RAMJEE to provide data communication signaling and control to further improve the system performance.

10. Claims 8-10 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over RAMJEE in view of BRUNO in U.S. Patent No. 6,614,765, hereinafter referred to as BRUNO.

Referring to claims 8-10, 13-15, RAMJEE differs from the claims, in that, it does not disclose the features of providing routing update and routing update acknowledgement, which are also well known in the art and commonly used in communications field for dynamically managing the routing of information over the communication network.

BRUNO, for example, from the similar field of endeavor, teaches the utilization of routing update and routing update acknowledgement (see col. 6, line 46 to col. 7, line 22), which can be easily adopted by one of ordinary skill in the art to implement into the method of RAMJEE to provide the dynamic management of the routing of information over the communication network to further improve the system efficiency.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mishra et al., Frid et al., Agraharam et al., La Porta et al. '134, '505, '359 & '007, and Feder et al. are all cited to show the common feature of wireless packet data communication utilizing mobile stations, base stations, routers, using mobility aware access networks similar to the claimed invention.

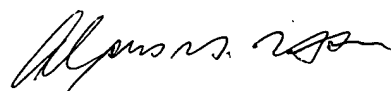
Art Unit: 2616

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alpus H. Hsu whose telephone number is (571)272-3146. The examiner can normally be reached on M-F (5:30-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571)272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AHH



Alpus H. Hsu
Primary Examiner
Art Unit 2616